

AMPEX

News-makers



VPR-4400

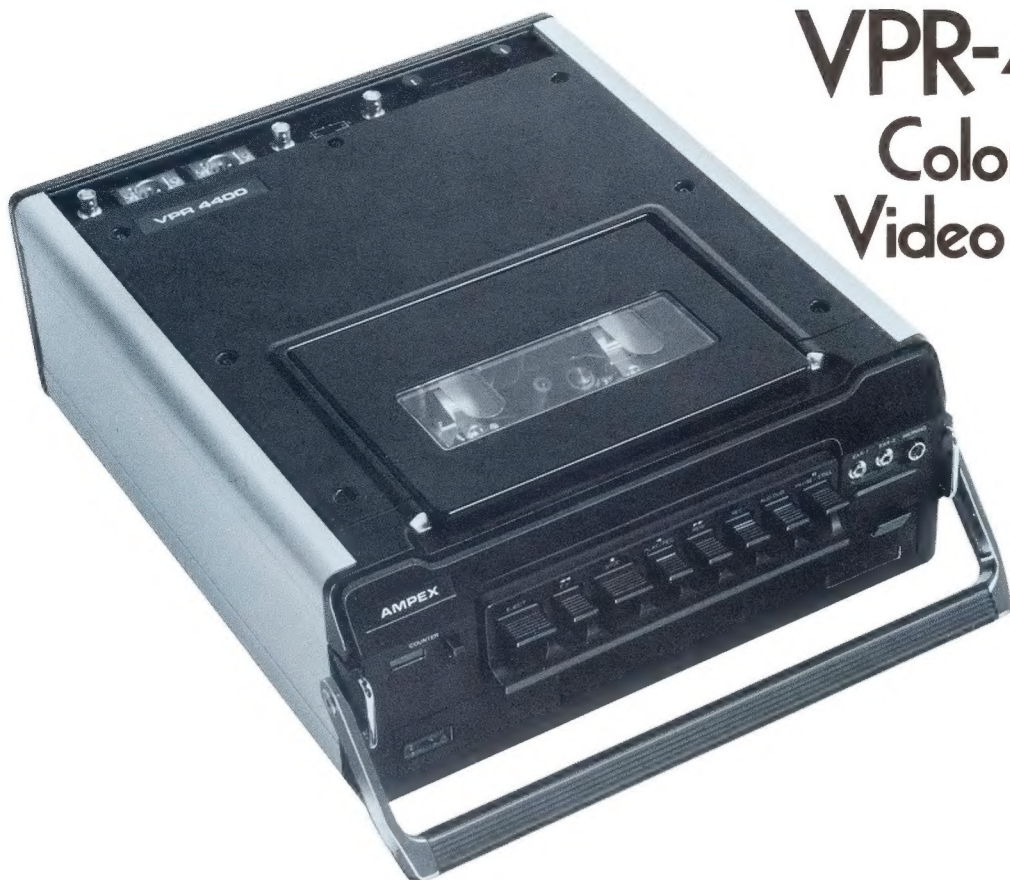
Color Portable
Video Cassette
Recorder



VPR-8300

Full Editing
Video Cassette
Recorder



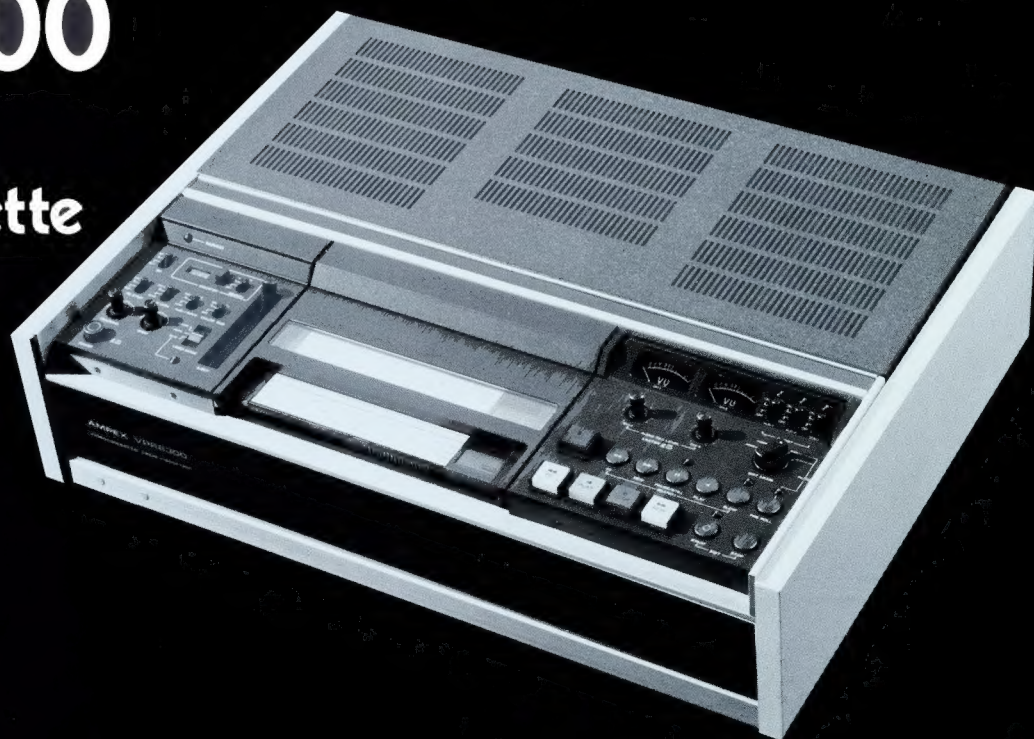


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Get A Lift

out of doing the news with the new, portable Video Cassette Recorder from AMPEX: VPR-4400

Slung on the shoulder or resting on the ground—for true freedom in the field, the VPR-4400 is the ideal work-mate for any portable television camera.

The VPR-4400 uses the popular two-head helical scan design, the U-Standard cassette, and NTSC standard video signal system. This rugged recorder features unsurpassed quality and compactness, combining broadcast-quality color pictures with a host of features unexpected in a unit of its small size and price.

At last—a video recorder designed specifically for ENG applications.

For reliability and convenience in the field, the VPR-4400 is tough to beat. Weighing in at only 26 lbs. with cassette and battery inside, it's the lightest unit going, and it uses just about half the power of similar recorders to give longer operating time on the rechargeable PBP-1 battery. There's even a handy warning lamp that winks at you when battery power is low or humidity is too high. A fully charged battery provides 2 hours of continuous operating time to give video crews greater freedom in the field.

The VPR-4400 is loaded with news-making features: A pause/still button permits pauses in the record mode and still-framing in playback. The special dubbing switch lets you make quality tape transfers effortlessly. Recorder start/stop is fully remotable and can be actuated by camera trigger or through the remote connector. With its internal/external color sub-carrier facility and built-in color playback amplifier, you're assured of high-quality, reproducible pictures before you leave the scene—you'll know what's "in the can" before you return to the station.

The VPR-4400 uses the popular KCS-20 video cassette for a full 20 minutes of recording time. These tapes have full interchangeability with other U-Standard recorder/reproducers, providing outstanding system flexibility.

Operators and engineers will appreciate the advanced features of the VPR-4400. The built-in capstan servo mechanism assures stable, jitter-free tape speed, allowing the operation to lock to internal or external synchronization. Luminance drop-out compensation is built in, and BNC/XLR video/audio mic and line level connectors permit the recorder to be connected with other professional equipment.

Automatic editing is one of the most labor-saving conveniences yet to be offered in state-of-the-art ENG equipment. When you use the VPR-4400, every time you actuate the camera trigger or recorder pause button, an automatic assemble edit is created, virtually eliminating recorded sequence gaps. This feature alone will cut post-shoot editing time dramatically.

Anyone who uses the VPR-4400 will appreciate the human engineering in the full-function keyboard and the innovative multi-meter. A 5-position switch selects battery power, video and audio levels, and servo lock—all indicated by a single meter.

Sound levels can be controlled by the internal audio limiter or adjusted manually with separate controls for each audio channel; a sound-only dub button lets you record audio only. Earphone jacks for both audio channels permit sound monitoring during record or playback.

Our VPR-4400 system includes an AC-44 adapter/charger, which can be used to

convert 120V AC power to 12V DC, or to charge up to two PBP-1 batteries simultaneously. The AC-44 has an indicating meter and LED to display charging progress, and a built-in protection circuit automatically prevents over charging.

The advanced features and recording characteristics of the VPR-4400 rival those of other, far more expensive field recorders. For the budget-minded user seeking ENG portability, this is the choice.



VPR-4400 Standard Equipment & Accessories

Our self-contained video cassette recorder comes complete with adjustable shoulder strap and the following other accessories:

- battery, type PBP-1
- earphone
- camera mating connector
- remote start/stop mating connector
- AC power adapter/charger, type AC-44
- two power cords (AC and DC) for the AC-44
- operation/maintenance manual.

A metal carrying case, KCS cleaning cassette, and automobile cigar lighter D.C. adapter are available as options.



Soaring To New Heights

in electronic journalism: AMPEX VPR-8300—meeting the challenge of ENG

Whether you hook up in a mobile van or back at the broadcast station, the VPR-8300 is the directors' choice for flexible, versatile editing of ¾" video cassettes. The VPR-8300 allows complete tape interchangeability with other ¾" U-Standard VTR's, with recording time up to 60 minutes on the KCA-60 video tape cassette. The VPR-8300 utilizes a two-head helical scan design and NTSC video signal system.

Full-editing functions feature simultaneous audio/video assemble editing plus independent or combination insert editing for the video and two separate audio channels. A built-in automatic editing feature permits edit point accuracy of ± 5 frames. The speed-search function gives added flexibility and is capable of fast forward, rewind, pause/still and slow motion playback—with the tape loaded around the head drum. This means fast and easy searching for all edit points. A tape counter memory operates for tape search back to a preset point with the recorder in the rewind mode and off-loaded from the head drum. To facilitate the use of a remote control unit, we included a 45-pin connector in the back panel.

Well-designed select switches and push button clusters make all operations simple and fool-proof. For easy frame scanning the

slow-motion function is factory preset at 1/15 speed but can be adjusted to other rates to suit requirements. The full-editing design of the VPR-8300 gives the operator complete editing flexibility at the console, making the use of external controllers unnecessary.

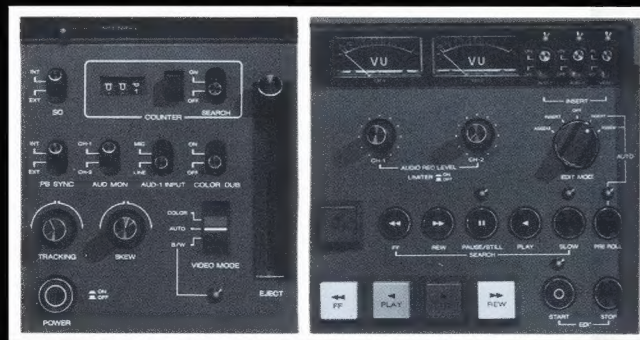
The VPR-8300 has a host of electronic features to maximize both operational simplicity and configuration versatility. Our recorder has its own drop-out compensator, and a built-in capstan servo mechanism assures jitter-free, stable tape speed for operation with internal or external V-locked synchronization. The internal-external color sub-carrier facility permits phase-locked color signal playback with optional Ampex digital time base corrector. Audio record levels may be controlled automatically by audio limiter or manually, with both channels individually adjustable; separate VU meters indicate volume levels.

The VPR-8300 has full dubbing capability and features professional BNC/XLR video/audio connectors.

In addition to all the other design features, our VPR-8300 can be easily serviced—with plug-in/snap-in modules and module access without extension cards.

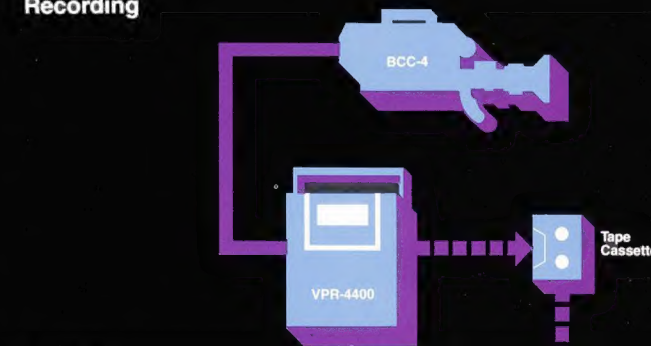
VPR-8300 Standard Equipment & Accessories

The VPR-8300 comes complete with AC power cord and an operation/maintenance manual. A 60/50 Hz modification kit and KCA cleaning cassette are available as optional accessories.

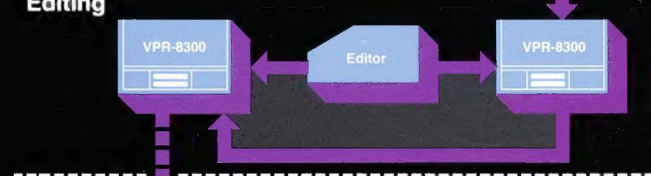


AMPEX ENG SYSTEM

Recording



Editing



Playback



VPR-4400 and VPR-8300

The tough, versatile news team from AMPEX —the need is NOW.

News is a NOW business requiring NOW technology. Fast-breaking events and tough competition mean being on the scene—where and when news is being made. State-of-the-art ENG technology gives you the required flexibility, with portable, broadcast-quality systems to stay one jump ahead of the competition.

Because of the pronounced economic advantages and greater news-gathering flexibility of videotape over film, ENG systems have already gained wide acceptance throughout the broadcasting industry.

AMPEX brings it all together with an affordable, able-bodied pair of video cassette recorders to give you unexcelled tape recording, editing and reproducing capability for ENG applications.

Whether used together or independently, the $\frac{3}{4}$ " U-Standard format of the VPR-4400 and VPR-8300 makes either unit compatible with other U-Standard equipment.

AMPEX took all of the most-wanted features in ENG VTR systems and put them together in two very neat little packages. Together, the VPR-8300 and -4400 make a perfectly matched, hard-working news pair. When you team them with the new Ampex BCC-4 self-contained color minicamera you can be confident of quality, reliability, and top performance under the most demanding ENG applications.

AMPEX has the answer for the economy-minded broadcaster who wants to triple his newspower on a budget.



VPR-4400

Specifications

Format: U-standard $\frac{3}{4}$ " video cassette tape
Recording Time: 20 minutes on a KCS-20 video cassette tape
Video Recording System: Rotary two-head helical scan system
 Luminance: FM recording
 Color Signal: Converted subcarrier direct recording
Video Signal System: Standard, NTSC type color signal
Power Requirements: Nominal 12V DC (11V to 15V DC) 120V $\pm 10\%$ AC by using the AC-44 power adaptor
Power Consumption: 14 watts (12V DC input) nominal
Battery Capacity of PBP-1: 3 AH at 5 hour discharge rating at 24°C (75°F)
Operating Hour Rate: More than 2 hours with fully charged new battery at 24°C (75°F)
Operating Temperature: 0°C to 40°C (32°F to 104°F)
Storage Temperature: -10°C to 60°C (14°F to 140°F) (without rechargeable battery)
Operating Position: Horizontal or vertical
Weight (nominal): 11.7 kg (26 lbs.) (With a rechargeable battery and a KCS-20 video cassette inside)
Dimensions (nominal): 335mm (W) X 135mm (H) X 409mm (D) (13.19" W X 5.31" H X 16.10" D) excluding handle and feet.

TAPE TRANSPORT

Tape Speed: 95.3mm/sec (3 $\frac{3}{4}$ ips)
Relative Head to Tape Speed: 10.26 m/sec (404.3 ips)
Fast Forward Time: Less than 3 $\frac{1}{2}$ min for KCS-20 tape
Rewind Time: Less than 2 $\frac{1}{2}$ min for KCS-20 tape
Wow and Flutter: Less than 0.25% RMS (method, playback of reference tape)
Line Jitter and Drift: Less than ± 0.5 H (condition, machine is steady)

VIDEO SIGNAL

Video Input: 0.5V to 2.0V (P-P) 75 ohms unbalanced
Video Output: 1V (P-P) ± 0.2 V 75 ohms unbalanced
Video S/N Ratio: Luminance more than 45 dB (Rohde and Schwarz noise meter)
Horizontal Resolution: Monochrome more than 300 lines
 Color more than 230 lines

AUDIO SIGNALS

Audio Input: Mic -70 dBm 600 ohms balanced X 2 ch or line -20 dBm
 600 ohms balanced X 2 ch
Audio Output: Line -10 dBm 600 ohms unbalanced X 2 ch
Audio S/N Ratio: Greater than 45 dB at 3% distortion level and limiter switched to off position
Audio Frequency Response: 100 to 12 KHz $^{+3}_{-6}$ dB
Output Voltage: Nominal 12V DC (12 to 14V)
Output Current: VTR mode up to 2.3A
 Battery mode up to 1.1A X 2
Power Source: AC 100/120V, $\pm 10\%$ 50/60 Hz
Power Consumption: 60W nominal
Using Battery Pack: Battery Pack PBP-1
Operating Temperature: 0°C to 40°C (32°F to 104°F)
Dimensions (nominal): 120mm W X 136mm H X 359mm D (4.72" W X 5.35" H X 14.12" D) (excluding the handle)
Weight (nominal): 4.8 kg (10.4 lbs)
Charging Meter: provided
Charging Time: approximately 8 hours to charge PBP-1 battery up to full condition after normally discharged

VPR-8300

Specifications

Format: U-standard $\frac{3}{4}$ " video cassette tape
Recording Time: 60 minutes on a KCA-60 video cassette tape
Video Recording System: Rotary two-head helical scan system
 Luminance: FM recording
 Color Signal: Converted subcarrier direct recording
Video Signal System: Standard NTSC type color signal
Power Requirement: 100/120V $\pm 10\%$ AC, 60 Hz (50 Hz conversion kit available)
Power Consumption: 110 watts nominal
Operating Temperature: 5°C to 40°C (41°F to 104°F)
Storage Temperature: -10°C to 60°C (14°F to 140°F)
Operating Position: Horizontal only
Weight: 30 kg (66.6 lbs) nominal
Dimensions (Nominal): 610mm (W) X 195mm (H) X 450mm (D) (24.2" W X 7.68" H X 17.72" D)

TAPE TRANSPORT

Tape Speed: 95.3mm/sec (3 $\frac{3}{4}$ ips)
Relative Head to Tape Speed: 10.26 m/sec (404.3 ips)
Fast Forward Time: Less than 6 min for 60 min tape
Rewind Time: Less than 5 min for 60 min tape
Wow and Flutter: Less than 0.2% RMS (method, playback of reference tape)
Line Jitter and Drift: Short term less than ± 10 usec within any one tenth of second.
 Long term less than ± 64 μ s.

VIDEO SIGNAL

Video Input: 0.5V to 2.0V (P-P) 75 ohms unbalanced
Video Output: 1V (P-P) ± 0.2 V 75 ohms unbalanced (a second video output will be added after the first 25 units)
Video S/N Ratio: Luminance more than 45 dB (Rohde and Schwarz noise meter)
Horizontal Resolution: Monochrome -300 lines
 Color -230 lines

AUDIO SIGNAL

Audio Input: Mic -70 dBm 600 ohms balanced
 Line +4/-20 dBm 600 ohms balanced
Audio Output: Line +4/-20 dBm 600 ohms balanced
 Headphone output -28 dB/-37 dB 8 ohms unbalanced
Audio Signal to Noise Ratio: Greater than 45 dB at 3% distortion level and limiter switched to off position
Audio Frequency Response: 80 to 12 KHz ± 3 dB

NOTE

Environment Test Conditions for VPR-4400 and VPR-8300
 Tape transport, video and signal specifications measured at 25°C (77°F), 60% temperature and relative humidity

Ampex Corporation reserves the right to change specifications without notice and without obligation. These specifications supersede all previous specifications, stated or implied.

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Litho in U.S.A.—P-264—9-76